

REMARKS/ARGUMENTS

Favorable reconsideration of the present application is respectfully requested.

The Examiner has rejected claims 1-29 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,399,016 to Burrow ("the Burrow patent").

Applicants respectfully traverse the rejection.

The Examiner argues that all the features of Claim 1 are disclosed in the Burrow patent, except for the requirement that slag tapping means are located on a cast house platform and end metal tapping means and end slag tapping means are located on an end tap platform that is at a lower height than the cast house platform. The Examiner then argues that the smelting plant of the Burrow patent is "arranged and operated in substantially the same manner as that of the instant claims" and therefore requires operators to be located at substantially the same locations as in the subject claims. As a result, the Examiner believes that the location of end tapping operations on a platform that is lower than the cast house platform is obvious. However, the flaw in the Examiner's argument is that the Burrow patent does not teach or suggest that the smelting plant is arranged and operated as recited in claim 1.

Specifically, the Burrow patent defines a direct smelting plant that is divided into a series of circumferentially spaced zones so that the plant operations in each zone do not interfere with operations carried out in adjacent zones. Operations in some zones are more frequent than operations in other zones. A circumferential arrangement of operations results in the more frequently used zones being cramped in terms of utilized space in comparison to space allocated to less frequently used operations that is effectively under utilized. For example, the arrangement of operations in the Burrow patent includes metal tapping and metal end tapping

operations in the same zone, but the end tapping operations are utilized less frequently than the metal tapping operations. In contrast, claim 1 recites:

“the metal tapping means and the slag tapping means are located so as to be accessible by plant operators on a cast house platform and the end metal tapping means and the end slag tapping means are located to be accessible by plant operators on an end tap platform that is at a lower height than the cast house platform.”

The Burrow patent does not teach or suggest such structures being located on different floors at different heights in the casthouse.

The subject application is also not restricted to the zones being circumferentially spaced around the plant. For example, Figures 3, 4 and 5 of the subject application show that the slag tap and slag drain zones (i.e. zones 3 and 4 of the Burrow patent) overlap and are vertically separated by the cast house floor.

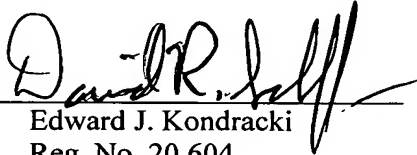
In view of the teaching in the Burrow patent being limited to the circumferential positioning of respective vessel access facilities, and the total lack of any teaching or suggestion to vertically position the metal and slag tapping means above the end metal and end slag tapping means, as recited in claim 1, claim 1 is not obvious over the Burrow patent. Therefore, because the Examiner has failed to satisfy the required initial burden to establish a *prima facie* case of obviousness of claim 1, and claims 2-29 that depend therefrom, the §103 rejection thereof is untenable. Accordingly, the Examiner is respectfully requested to withdraw the §103 rejection and issue a Notice of Allowance for claims 1-29.

All claims as currently presented are believed to be in condition for allowance.

Passage of the application to issue at an early date is earnestly solicited.

Respectfully submitted,

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